

What is claimed is:

1. An audio apparatus comprising:

a main speaker receiving an audio signal from a sound source and outputting sound of the sound source;

5 a signal processing circuit for performing signal processing on the audio signal from the sound source to generate a sound effect audio signal for reproduction of a sound effect required of the sound of the sound source; and

at least one sound effect speaker receiving the sound effect
10 audio signal generated by the signal processing circuit and outputting the sound effect required of the sound of the sound source.

2. An audio apparatus according to claim 1, wherein the signal processing circuit includes a frequency equalizer, a delay circuit,
15 and an attenuator.

3. An audio apparatus according to claim 2, wherein the signal processing circuit further includes a reverberation addition circuit.

20 4. An audio apparatus according to claim 1, wherein the signal processing circuit performs delay processing on the audio signal sent from the sound source to delay a time at which the sound effect outputted from the sound effect speaker arrives at a position of
25 a listener, hearing the sound of the sound source outputted from the main speaker and the sound effect outputted from the sound effect speaker, by a required set-time interval with respect to a time

of arrival of the sound of the sound source outputted from the main speaker.

5. An audio apparatus according to claim 1, wherein the signal
5 processing circuit performs attenuation processing on the audio
signal sent from the sound source to decrease a sound pressure level
within a required set-time interval starting from a rise time of
the sound effect outputted from the sound effect speaker in a position
of a listener hearing the sound of the sound source outputted from
10 the main speaker and the sound effect outputted from the sound effect
speaker, to a required set value smaller than a sound pressure level
within the predetermined set-time interval starting from a rise
time of the sound of the source sound outputted from the main speaker.

15 6. An audio apparatus according to claim 1, wherein the audio
apparatus is a vehicle-mounted audio apparatus using a passenger
chamber of a vehicle as a sound-reproduction space for the main
speaker and the sound effect speaker.